

Chapter 2.2

The Archeological Evidence of the Anosy Region

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Abstract

The Anosy region of southeastern Madagascar possesses an historical record almost unprecedented in the world of pre-state societies. There is a complete archeological sequence, based on surveys, test excavations, and absolute radiocarbon dates. The accounts of would-be colonizers of the XVIIth and XVIIIth centuries, particularly the detailed account of Etienne Flacourt (1661), provide a detailed view of people just coming into contact with the emerging world of European commerce and militarism. We also have detailed studies of existing Tanosy communities and their traditions. While archeological constructions based on settlement traces and potsherds left by local people, historical constructions based on the written accounts of outside visitors (albeit visitors with close social relations and some understanding of the language), and ethno-historical constructions based on geographical and anthropological inquiries must not be uncritically combined, careful comparisons provide an extraordinarily rich record. Our preliminary studies in the Anosy region show that the area has great potential for future research documenting processes of ecological and cultural change.

Résumé

L'évidence archéologique de la Région de l'Anosy. La région de l'Anosy dans le sud-est de Madagascar montre une information historique presque sans précédent dans le monde des sociétés pré-étatiques. Il y existe une séquence archéologique complète mise en évidence grâce aux inventaires, aux fouilles-test et aux dates absolues du radiocarbone. Les rapports des premiers explorateurs, prétendus colonisateurs des XVIIe et XVIIIe siècles, et plus particulièrement les écrits détaillés d'Étienne Flacourt (1661) permettent d'imaginer précisément les peuples malgaches qui venaient juste d'entrer en contact

avec le nouveau monde du commerce et du militarisme européen. Nous disposons également d'études détaillées sur les communautés Tanosy existantes et leurs traditions. Si les constructions archéologiques, basées sur des traces d'installations ou type d'élevage laissés par les gens de la région, les constructions historiques, basées sur des données écrites par des visiteurs étrangers (même s'il s'agit de visiteurs ayant entretenu des relations sociales étroites, certains montrant même une compréhension de la langue) et les constructions ethnohistoriques, basées sur les enquêtes géographiques et anthropologiques, ne doivent pas être combinées aveuglément, il n'en reste pas moins que leur comparaison minutieuse constitue un trésor inégalable. Nos premières études dans la région de l'Anosy montrent qu'il s'agit d'une région de prédilection pour de futures recherches à mener dans le cadre de la documentation des processus inhérents aux changements écologiques et culturels.

The Archeological Evidence: A Summary

The Anosy has been the object of an intensive, long-term study by Rakotoarisoa (1994, 1998) and the team of the Musée d'Art et d'Archéologie de l'Université de Madagascar. The archeological sequence is well defined, although it is possible that some settlements have not yet been recorded (Wright *et al.* 1993). In the Efaho Valley, archeological research has shown that there was a lengthy occupation divisible into five cultural units.

What may be evidence of relatively early human

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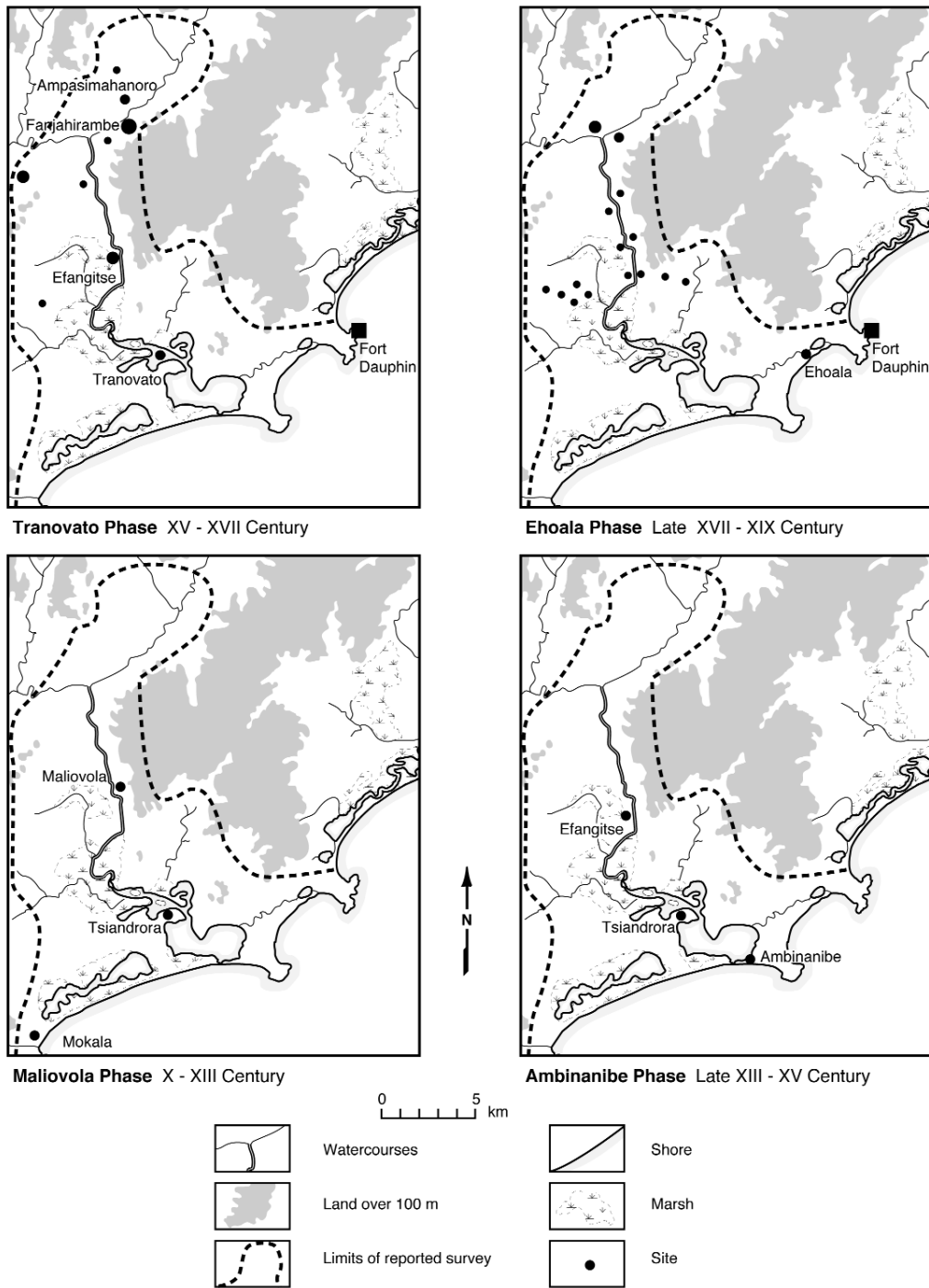


Figure 1. Phases of historical records of human settlements in the Anosy Region.

occupation in the Anosy Region was discovered by Andreas Nillson at the rockshelter of Ankadava 4 on the mountain slopes overlooking Tolagnaro (A. Nillson, pers. comm.). He collected fragments of heavy basins with thick walls, made from a clay containing quantities of coarse quartz fragments. These fragments lack any decoration. Similar ceramics farther north on the east coast have been dated as early as the VIIIth-century A.D. (Dewar and Wright 1993, Wright and Fanony 1992). However, until similar ceramics are excavated in secure stratigraphic context with datable materials we cannot define an archeological phase of this period in the Anosy region.

Radiocarbon dates indicate that the Maliyola Phase flourished during the IXth to XIIth centuries. The few known sites are about 1 ha in size. Although larger sites of the Maliyola Phase may exist, they have not yet been located. Among the known sites, Mokala and several other coastal sites have evidence of fishing, Tsiandrora has evidence of both fishing and cattle herding, and others, such as Maliyola itself, lack such evidence but are ideally situated for valley bottom cultivation (Fig. 1). Given the available archeological evidence, one could infer a network of small settlements with complementary economic specializations (or perhaps occupied in seasonal rotation) indicating a relatively simple segmentary society. Potters produced plain basins and spherical jars with a coarse fabric, and finer bowls, often with a red slip, comparable to those from contemporary sites in the Androy to the west, the more distant Antongil area in the northeast, and Ampasindava area in the northwest (Dewar and Wright 1993). The fine bowls often have a form of decoration otherwise unknown, both within Madagascar and elsewhere, of imprints of the leaves of grass in the clay inside the rim. There is limited evidence of iron working at most settlements. A few sherds of chlorite schist vessels, as well as graphite-coated basins, which imitate chlorite schist forms, indicate participation in a local east coast exchange network, bringing chlorite vessels from the north. However, in contrast to other areas of Madagascar, ceramics imported from East Asia or the Near East are very rare suggesting that at the inception of village life, the peoples of the Efaho Valley were not in regular contact with the broader Indian Ocean. Given their isolation and the limited number of coastal communities, we expect the impact of Maliyola people on their environment to be rela-

tively limited. Some of the wooded coastal dunes and terraces around the estuaries would be impacted by the cutting of fuel wood and clearing of gardens, and hunting may have had an impact on the vertebrate fauna.

By the XIIIth century, the earlier Maliyola ceramic assemblage, with its diversity of slipped bowls and basins, had probably been replaced by the Ambinanibe Phase, with a ceramic assemblage of few bowls and many spherical jars with textured decoration. The few known sites cover 1 to 2ha, suggesting that relatively simple social organization was still characteristic of the area (Fig. 1). However, it is still possible that archeologists will find more elaborate settlement sites in the future. The Ambinanibe sites are found to have the same diversity of microenvironments as the sites of the preceding Maliyola Phase. Evidence of fishing is common at Ambinanibe itself, and evidence of the butchering of herded cows is common at Tsiandrora. The interior site of Efangitse (see also below) is located in an area suited to valley bottom cultivation. The characteristic local ceramics have a coarse fabric. Locally made spherical jars were richly decorated with incised and appliqué designs. This pottery is similar to that of the southern interior of Madagascar, and it is possible that the change in ceramics indicates closer relations with herders of the interior plains. The few smaller bowls are distinguished only by crude notching of the lip. All sites have evidence of iron working. Sherds of chlorite schist from the north and of imported Chinese celadon show participation in both local and long-distance exchange. In sum, though there is suggestion of broader contacts with Indian Ocean exchange networks, there is little evidence of settlement hierarchy or social differences. Though settlements are only slightly larger indicating little change in population, increased use of cattle probably required more clearing of woodlands for pasture, and increased smelting of iron would have required more woodcutting for charcoal.

The succeeding Tranovato Phase of the XVth to XVIIth centuries is well known from surveys (Wright *et al.* 1993) and soundings (Vérin and Heurtebize 1974). The Tranovato Phase settlement is concentrated in the formerly sparsely inhabited middle and upper Efaho Valley. It was these Tranovato Phase settlements which were visited, and in some cases destroyed, by the French colonizer Flacourt and his allies (Wright and Rakotoarisoa 1997, 1998).

The archeological evidence shows that this period saw fundamental economic and socio-political changes. The settlement pattern was dominated by large fortified communities, often protected by multiple ditches covering up to 5 ha (Fig. 1 upper left). Smaller settlements of a hectare or less were also surrounded by single polygonal ditches. The larger centers had more elaborately decorated graphite coated serving bowls. They also had more imported vessels, as is detailed below. The evidence of both settlement hierarchy and varying consumer goods indicates stratified society with ranking figures living in the larger fortified settlements and directing military campaigns against their enemies. The locations of sites throughout the valleys indicate that exploitation of the river terraces and marshes was important. Additionally, test excavations have recovered carbonized grains of rice. As in earlier phases, there is also evidence of cattle herding. Local potters still produced spherical jars, but the combed decoration on these vessels represents a tradition long established on the northeast coast. The bowls are reduction-fired, coated with graphite and decorated with triangular impressions, like those used in many parts of Madagascar in the XVth and XVIth centuries. Only one Tranovato Phase site, the XVth century center at Efangitse, has a simplified form of the Ambinanibe incised ceramics. Unfortunately, our chronology is not precise enough to say whether this represents a late Ambinanibe Phase hamlet that preceded the Tranovato center, or a neighborhood of that center in which some people continued to use pottery developed from Ambinanibe Phase models. In either event, there was a cultural disjunction at the beginning of the Tranovato Phase. Evidence of iron-working is widespread. Spindle whorls indicating the manufacture of thread occur, as they do at many contemporary communities in the southwestern Indian Ocean. Efangitse and Tranovato, the earlier Tranovato Phase capitals, imported Chinese stoneware, celadon, and blue-and-white porcelain occur. Fanjahirambe, the documented capital of the mid-XVIIth century chiefdom, imported Chinese, Portuguese, English, and French ceramics indicating the broader relations of the political elite. The export of cattle is well-documented. It is likely that with increased population, continued iron smelting, and increased cattle herding for export, much lowland forest was severely impacted.

The Tranovato Phase developed into the succeeding Ehoala Phase late in the XVIIth century. The spherical jars became rare, being replaced by necked jars and iron pots. The graphite-coated bowls continue with the only difference being the shift of the imprinted design to the interiors, as in other parts of Madagascar's east coast. Historical accounts indicate that the subsistence economy was still focused on irrigated rice, though New World crops such as manioc became important. The basic settlement pattern continued, though sites were somewhat fewer and smaller, and they tended to be located in the upper valleys away from the coast (Fig. 1, upper right). Imported Chinese and European pottery was common and gunflints (and presumably guns) were imported from Europe. It seems that the Tanosy were able to maintain their socio-political patterns in the face of repeated attacks. Though there is little evidence of continued growth, documents show that the export of cattle and slaves continued. It is possible that during this time, with the removal of communities from the coast, there was less pressure on the coastal forests, but exploitation of the interior to allow for rice paddies continued, and cultivation of the high ridges for manioc may have increased.

In the Efaho Valley, there seems to have been a slow development of economically diversified, but socially simple local communities. These were followed by a sudden appearance of societies with marked socio-political stratification and cultural relations with societies farther north along the east coast. It is possible that these stratified societies developed concurrently in valleys to the north, and were therefore not produced by the local conditions in the Efaho Valley. It is also possible that they were merely more intensely honed in the Efaho Valley as a result of conquest and exploitation. These southeastern chiefdoms persisted in spite of profound disruption by invaders, but, isolated in their small-coastal valley, they did not become more complex states.

Discussion

What does our construct tell about the potential for future research in the Anosy region? First, the coastal regions of the Anosy can produce uniquely important information on the relation between early human communities and the ecosystems of the humid forests and coasts. We have suggested above that from the earliest settlement through the XIVth

century A.D., a slow increase in human population, cattle herding, cultivation, and the smelting of iron ore diminished the coastal forests and their fauna. We can only evaluate such hypotheses with paleo-ecological evidence in the form of fossil remains of plants and animals taken from marshes and lakes. We need to contrast this evidence of changing later Holocene environments against paleo-economic evidence from the remains of collected marine and forest animals, herded domestic vertebrates such as cows, and from carbonized plant remains gathered through extensive excavation at archeological sites.

Second, the Anosy can produce unique information on the evolution of social and political complexity in human communities and the greatly amplified impact of these more complex communities on their environments. Our evidence indicates that beginning in the XVth century during the Tranovato Phase, ranked societies with richer and more powerful figures living in the larger centers developed. Such 'paramount chiefdoms' no longer exist, and our understanding of this import precursor to more developed states and empires depends on the archeological study of well-documented examples such as that of the Anosy. Only careful archeological excavation of sites would enable the documentation of details of life in these centers, both aspects mentioned by Flacourt and others not stated in written accounts, for example, the details of economic systems and the lifestyles of lower-ranking families. In addition, only careful excavation of the main centers focusing on the evolution of fortifications, buildings and their destruction, and of the debris of daily life would allow the testing of hypotheses about the complex process of competition between paramount chiefs, military conflict, and the shift from one capital to another. It is only with such research and paleo-ecological studies that we can assess the impact of larger populations, more diversified food production systems, and trade demands on the natural environment only hinted at in the Flacourt account and the traditional histories.

Just as the early documents richly reward restudy with new methods and new intellectual perspectives, the archeological record can be used to answer new questions, particularly with the rapid improvement in archeological techniques. However, the access of scholars - and through them the modern Malagasy, particularly the Tanosy - to the rich archeological record of the Efaho Valley may be definitively cut.

The most important and best preserved sites of the early Maliovola and Ambinanibe Phases are on the great Pleistocene sand ridges soon to be exploited for heavy metals, totally destroying all their archeological sites. We believe that Ndrenani, at the mouth of Andohafotsy River, has already been badly damaged by port development, and we are deeply worried that Tsiandrora, at the mouth of the Efaho River, with its excellent preservation of bone and carbonized plant remains will be destroyed in the search for heavy metals. Thanks to the de Heaulme organization in Tolagnaro, one of the Tranovato Phase capitals is protected, but the better preserved Tranovato and Ehoala phase centers farther up the valley are subjected to intensive cultivation because of the high phosphate and nitrate concentrations in the archeological deposits. The more modest Tranovato sites, which may document the lives of the lesser known poor communities of the Tanosy, are no less threatened. Just as the priceless original copies of Flacourt's account are preserved in libraries and archives, so these unique archeological sites should be preserved for future research. If development absolutely requires that they cannot be preserved, they must be carefully excavated and recorded before they are destroyed. Preservation and research are worthy goals for the immediate future.

References

- Dewar, R.E. and H.T. Wright. 1993. The Culture History of Madagascar. *Journal of World Prehistory* 7:417-466.
- Flacourt, E. 1661 [1995] *Histoire de la Grande Ile* [Recent edition edited and with notes by Claude Allibert]. Paris: INALCO and Karthala.
- Rakotoarisoa, J.A. 1994. *Le peuplement de l'Anosy, les rapports de l'homme et son environnement, dans le extreme Sud-est de Madagascar*. Thèse soutenue à l'INALCO, Paris.
- Rakotoarisoa, J.A. 1998 *Mille ans d'occupation humaine dans le Sud-Est de Madagascar : Anosy, une île au milieu des terres*. L'Harmattan, Paris.
- Vérin, P. and G. Heurtebize. 1974. La Tranovato de l'Anosy. *Taloha* 6: 117-142.
- Wright, H.T. and F. Fanony. 1992. L'évolution des systèmes d'occupation des sols dans la vallée de la rivière Mananara au nord-est de Madagascar. *Taloha* 11:16-64.

Wright, H.T. and J.A. Rakotoarisoa. 1997. Cultural transformations and their impacts on the environments of Madagascar. Pp 309-331 in: Goodman, S.M. and B.D. Patterson, eds., *Natural Change and Human Impact in Madagascar*. Smithsonian Institution Press, Washington, D.C.

Wright, H.T. and J.A. Rakotoarisoa. 1998. The Context of the Flacourt settlement: The archaeological evidence of the Anosy Region. Pp 231-236 in: Allibert, C., ed., *Etienne de Flacourt Actes du Colloque d'Orleans. Etudes Océan Indien* No. 23-24.

Wright, H.T., J.A. Rakotoarisoa, G. Heurtebize and P. Vérin. 1993. The evolution of settlement system in the Efaho River Valley: A preliminary report on archaeological reconnaissances of 1983-86. *Indo-Pacific Prehistory Association Bulletin* 12: 2-20.